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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/615,397 | 07/09/2003 | Fabrice Villaume | L7307.03150 | 8487 |

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| EXAMINER | |
|---|---|
| NGUYEN, THU V | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 3661 | |

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/615,397 | VILLAUME ET AL. | |
| | Examiner | Art Unit | |
| | Thu Nguyen | 3661 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *05 November 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *14-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *14-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *05 November 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

The amendment filed on November 5, 2004 has been entered. By this amendment, claims 1-13 have been canceled, claims 14-19 have been added and claims 14-19 are now pending in the application.

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Coquin et al (US 5,668,541) in view of Sekine et al (US 6,067,497) and further in view of Cleary et al (US 4,638,437).

As per claim 14, Coquin teaches a process for aiding the driving of an aircraft running over the ground in an acceleration phase with a view to takeoff (col.2, lines 12-14; col.3 , lines 6-11), the process comprises: a current speed (col.2, line 42) and a value $\gamma 1$ representing acceleration/deceleration of the aircraft (col.2, lines 40-41; col.3, lines 65-67) are determined; and calculating the stopping position of the aircraft from distance ($v_{11}t^2/2\gamma 1t$) and the current position $D_1t$ of the aircraft (col.3, line 62); presenting the stopping position to a driver (col.4, lines 1-5). Coquin does not explicitly disclose that the acceleration is a predetermined

deceleration value corresponding to the deceleration during emergency braking and does not explicitly disclose calculating distance df in a separate procedure from the calculating stopping position and presenting the stopping distance to the driver. However, Coquin teaches stopping distance df ($v_{11}t^2/2\gamma 1t$) (col.3, line 62) with $\gamma 1t$ is a deceleration value ($\gamma 1t < 0$) and Sekine teaches calculating stopping distance with a predetermined reference deceleration value (col.4, lines 10-17), moreover, replacing the reference deceleration value taught by Sekine with a known emergency deceleration braking value would have been obvious. Further, Cleary teaches presenting the stopping distance to the driver (col.6, lines 49-62). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to determine stopping distance and to present the distance to the driver as taught by Sekine and Cleary in the display of Coquin in order to inform the driver of the capability of stopping without passing the run way.

3. Claims 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coquin et al (US 5,668,541) in view of Sekine et al (US 6,067,497) and further in view of Cleary et al (US 4,638,437) and Middleton et al (US 5,499,025).

As per claim 15, refer to claim 14 above. Further, Middleton teaches a head-up display arranged in proximity of the windscreen of the aircraft (col.2, lines 10-22; col.5, lines 13-21) which display symbol corresponds to the field of vision of the pilot and the stopping position of the aircraft on a running track (col.11, lines 60-67; col.13, lines 32-39). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to replace the

display of Coquin with the head up display of Middleton in order to facilitate following up aircraft position and stopping position to the pilot wearing a head up display.

As per claim 16-18, using inertial devices for determining speed and deceleration of the airplane, and determining the current position of the vehicle using GPS devices would have been well known.

As per claim 19, refer to claim 15 above.

***Response to Arguments***

Applicant's arguments on page 10-16 are moot in view of the new ground of rejection.

In response to applicant's argument on page 17, first paragraph and third paragraph, although Sekine teaches determining stopping distance which is applied to a vehicle, this would obviously be applied to an aircraft which is still running on the runway as well, since the aircraft running on the runway, in fact, just functions as a land vehicle, this is obviousness is clearly admitted by applicant in the specification page 2, lines 1-5.

Other highlighted details in page 17 are also moot in view of the new ground of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu Nguyen whose telephone number is (703) 306-9130. The examiner can normally be reached on T-F (7:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (703) 305-8233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

January 17, 2005

THU V. NGUYEN
PRIMARY EXAMINER